



FAQs

PCB Fluorescent Light Ballasts in Schools

THE PURPOSE OF THIS DOCUMENT IS PROVIDE ANSWERS TO FREQUENTLY ASKED QUESTIONS REGARDING THE IDENTIFICATION OF PCB (POLYCHLORINATED BIPHENYLS) FLUORESCENT LIGHT BALLASTS. IT IS NOT INTENDED TO PROVIDE GUIDANCE ON THE HANDLING OF LEAKING OR BURNED BALLASTS SINCE SUCH ACTIVITIES ARE LIMITED TO THOSE PERMITTED TO HANDLE HAZARDOUS WASTES. A LIST OF SUCH HANDLERS IS AVAILABLE ON THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION WEBSITE AT [HTTP://WWW.CT.GOV/DEP/PCB](http://www.ct.gov/dep/pcb).

Question - Which schools should be focusing on PCBs in fluorescent lighting?

PCB fluorescent light ballasts may be present in any school built prior to 1978 and which has not had a complete lighting retrofit since that year.(Ballasts are electrical devices that control voltage of the light).

Question - What should a school do to find out if it has PCBs in the light ballasts?

Schools built prior to 1978 should assume that they have PCB-containing ballasts if they have not completely retrofitted with new lighting. In these cases the school should install new energy efficient lighting which will save on energy costs and remove PCB-containing ballasts that may be present in the school.

If lighting replacement is not possible in the near term, pre-1978 schools should physically examine all fluorescent light ballasts that have not been retrofitted to see if they have leaked. This examination involves a series of simple steps that can be performed by maintenance staff at the school who are experienced with handling electricity and electrical equipment. There is no need for an outside consultant. As described further below, the ballast of each lighting fixture should be examined for date of manufacture, PCB markings and evidence of leakage.

Question - Why do PCBs leak from ballasts? How frequently is this a problem?

Fluorescent light ballasts can fail, overheat, or even burn causing a release of PCBs for a variety of reasons ranging simply from their age to electrical surges. Ballast failures are fairly common and the chance increases as ballasts age. Not all failures result in releases. A ballast most often

simply stops working. A recent evaluation of three schools in NYC found light ballast failure and release of PCBs in all three.

Question - What should schools do with old lighting that hasn't failed - is it OK to keep using?

It is best to replace old PCB-containing fixtures before they fail. The average life expectancy of a fluorescent light ballast is 10-15 years. Any ballast beyond that age should be considered to be at a heightened risk of failure. Failure can result in the release of PCBs, potentially exposing students and school staff, and resulting in a costly cleanup. A failed ballast is also a fire hazard.

Question - How should schools inspect their pre-1998 lighting?

1. Take a survey of the lighting fixtures in each classroom and hallway creating a log entry indicating the location and estimated date installed.
2. Develop a plan to inspect each fixture installed prior to 1978 going from room to room in an orderly and thorough sequence. Fixtures in which a bulb is out or which hum, flicker or emit a burnt odor should be the first priority as this may indicate a failing ballast.
3. Be sure to turn off electricity to the room being inspected, open the lens, remove the bulbs from the fixture and open the metal plate with a screwdriver to inspect the ballast. The inspector should wear protective gloves and clothing to prevent personal PCB exposure in the event a leak is encountered.
4. The inspector should note the date of manufacture posted on the ballast and look for markings indicating whether PCBs are present. If a ballast was manufactured between July 1, 1978 and July 1, 1998, it was required to be marked "No PCB" if it was made without PCBs. Such a marking definitively indicates that the ballast does not contain PCBs. However, if the ballast was manufactured during that time period or earlier and is NOT so marked, it must be assumed to contain PCBs and handled accordingly. (See photos)
5. Note whether there is any evidence of ballast failure. Darkened staining of the ballast itself or the surrounding metal cover or visible oil are indications of ballast failure.
6. Complete the log entry for the fixture making note of ballast date, PCB markings and any evidence of ballast failure.
7. Address leaking ballasts as described below.

NOTE: NEVER OPEN A BALLAST FOR ANY PURPOSE INCLUDING OBTAINING SAMPLES FOR PCB ANALYSIS. SUCH ACTION IS CONSIDERED TO BE CAUSING A LEAK. PCB STATUS IS DETERMINED AS DESCRIBED ABOVE.

Each fluorescent light ballast manufactured (“manufactured”, for purposes of this sentence, means built) between July 1, 1978 and July 1, 1998 **that does not contain PCBs shall be marked by the manufacturer** at the time of manufacture with the statement, **“No PCBs”**.

The language of this label, ‘NO PCBs’ is required on any fluorescent light ballast manufactured before 1998 which does NOT contain PCBs. The size and color are not required. However, the absence of this language **MUST** be taken to mean that the item **DOES** in fact contain PCBs.



OLDER BALLASTS



LEAKING BALLAST

Question - What should schools do if they find that PCB-containing ballasts have leaked?

Any leak of a solid, liquid, or gaseous chemical substance must be reported IMMEDIATELY to the Department of Environmental Protection 24 hours 7 days per week at

860-424-3338
or Toll Free at
1-866-DEP-SPIL
(1-866-337-7745)

- 1) Evacuate all people from the room.
- 2) Ventilate the area.
- 3) Keep the room off limits with door closed until the PCB contamination has been removed by a licensed spill cleanup contractor. A list of contractors is available at:

http://www.ct.gov/dep/lib/dep/emergency_response_spill_prevention/licensedspillcontractors.pdf

Question - Costs of this program - how can schools afford this?

Replacing older lighting with modern efficient lighting is good to not only remove PCBs from your school but also to increase energy efficiency and cut costs. Electric utilities have a program to assist with retrofitting older lighting with new energy efficient lighting. A **Lighting Rebate Application** is available on the electric utility websites.

NOTE: When installing new lighting, check to make sure that the ballasts in the new fixtures were not manufactured prior to 1978. While it is illegal to manufacture new ballasts with PCBs, it is still legal to sell old ballasts that were created prior to 1978.

For More Information

Questions about PCBs and their Removal: CTDEP – 860-424-3368

Questions about the health effects of PCBs: CTDPH – 860-509-7740

Web Resources:

USEPA fact sheet: <http://www.epa.gov/osw/hazard/tsd/pcbs/pubs/ballasts.htm>

NYC Dept of Education: <http://schools.nyc.gov/Offices/SCA/Reports/EPA/default.htm>